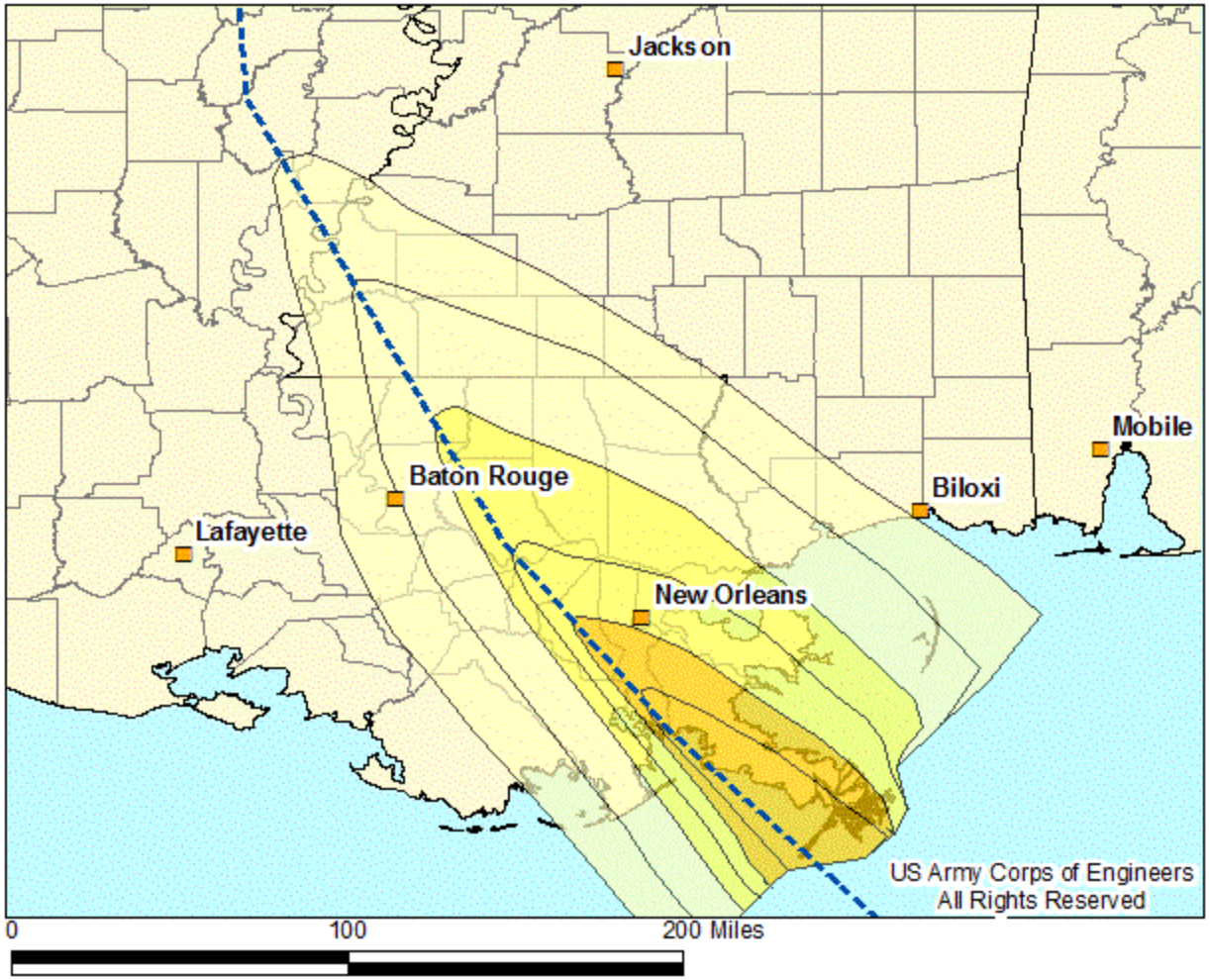
US Army Corps of Engineers

Hurricane Isaac Projected Damage Areas

Landfall Expected In About 28 Hours

For Planning Purposes Only!



Post Landfall Projected Damage Areas

This model is based on a Category 2 storm making landfall west of the Mississippi River Delta, LA.

Forecast Track

Projected Damage Areas

- CAT 0-type damage
- CAT 1-type damage
- CAT 2-type damage
- CAT 3-type damage
- CAT 4-type damage
- CAT 5-type damage

Information provided on this page displays a projected or actual Category 2 storm making landfall west of the Mississippi River Delta, LA. These projections are based on information from the NHC (1700 EDT 08/27/2012) forecast and extrapolated by LRL staff to represent a landfall condition that has either occurred or may occur in the near future.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

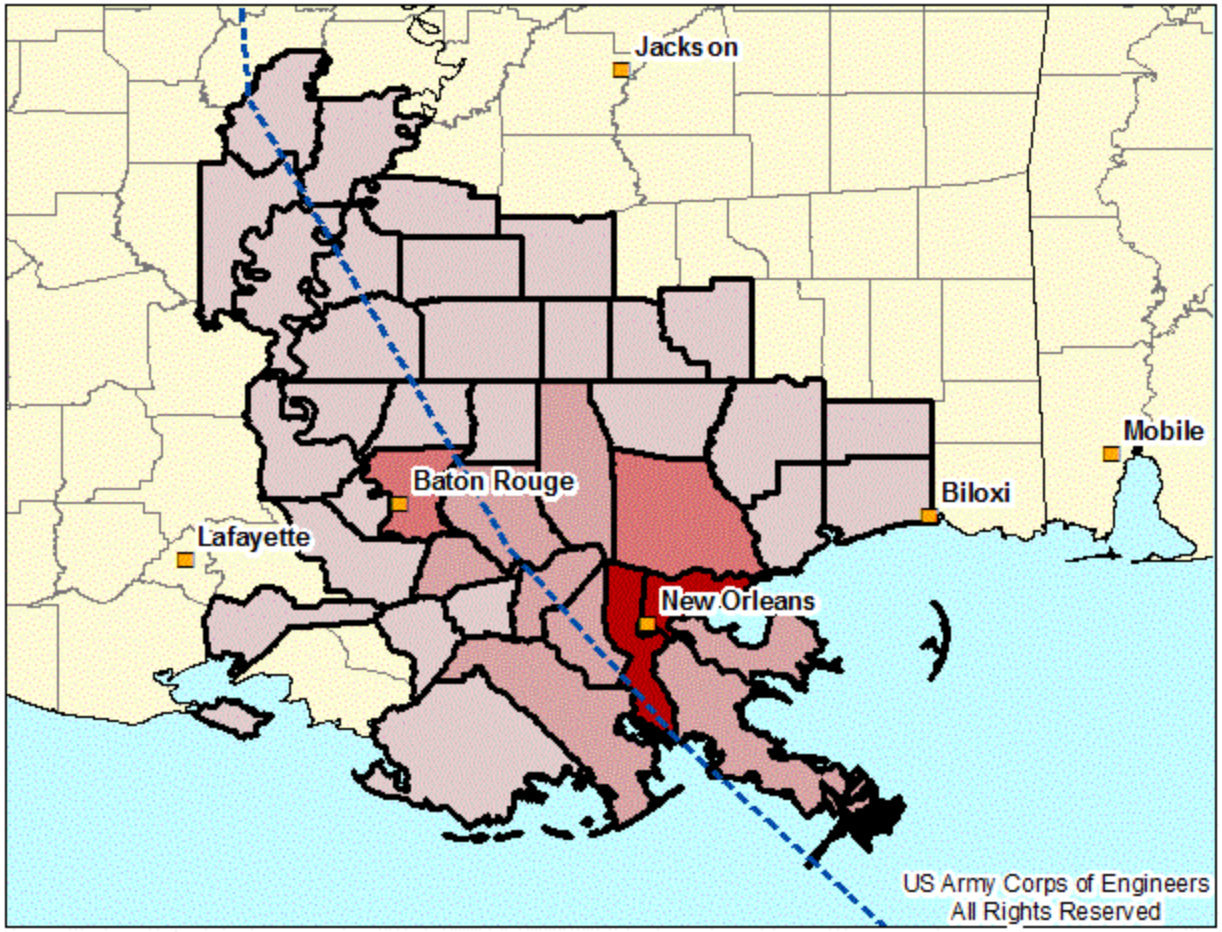
Hurricane Isaac Projected Damage Areas	
Generated By: Siemsen, LRL 1730 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Isaac Debris Model

Landfall Expected In About 28 Hours

For Planning Purposes Only!



Post Landfall Debris Model Results

Louisiana - 5,569,000 Yards
Mississippi - 325,000 Yards

Model results per County on following page

This model is based on a Category 2 storm making landfall west of the Mississippi River Delta, LA.

Forecast Track

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 2 storm making landfall west of the Mississippi River Delta, LA. These projections are based on information from the NHC (1700 EDT 08/27/2012) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Debris Model

Generated By:
Siemsen, LRL 1730 EDT 08/27/2012

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Debris Model

Landfall Expected In About 28 Hours

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Louisiana		Ascension Parish	115,000
		Assumption Parish	11,000
		Catahoula Parish	< 1,000
		Concordia Parish	13,000
		East Baton Rouge Parish	396,000
		East Feliciana Parish	24,000
		Franklin Parish	< 1,000
		Iberia Parish	< 1,000
		Iberville Parish	12,000
		Jefferson Parish	1,805,000
		Lafourche Parish	119,000
		Livingston Parish	229,000
		Orleans Parish	1,351,000
		Plaquemines Parish	168,000
		Pointe Coupee Parish	4,000
		St. Bernard Parish	167,000
		St. Charles Parish	213,000
		St. Helena Parish	22,000
		St. James Parish	23,000
		St. John the Baptist Pari	135,000
		St. Martin Parish	< 1,000
		St. Tammany Parish	402,000
		Tangipahoa Parish	208,000
		Tensas Parish	2,000
		Terrebonne Parish	73,000
		Washington Parish	57,000
		West Baton Rouge Parish	13,000
		West Feliciana Parish	7,000
Louisiana	5,569,000		
Mississippi		Adams County	21,000

State	Yards per State	County	Yards per County
Mississippi		Amite County	19,000
(continued)		Franklin County	7,000
		Hancock County	63,000
		Harrison County	99,000
		Jefferson County	3,000
		Lincoln County	3,000
		Marion County	< 1,000
		Pearl River County	58,000
		Pike County	30,000
		Stone County	< 1,000
		Walthall County	8,000
		Wilkinson County	14,000
Mississippi	325,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Isaac Debris Model

Generated By:
Siemsen, LRL 1730 EDT 08/27/2012

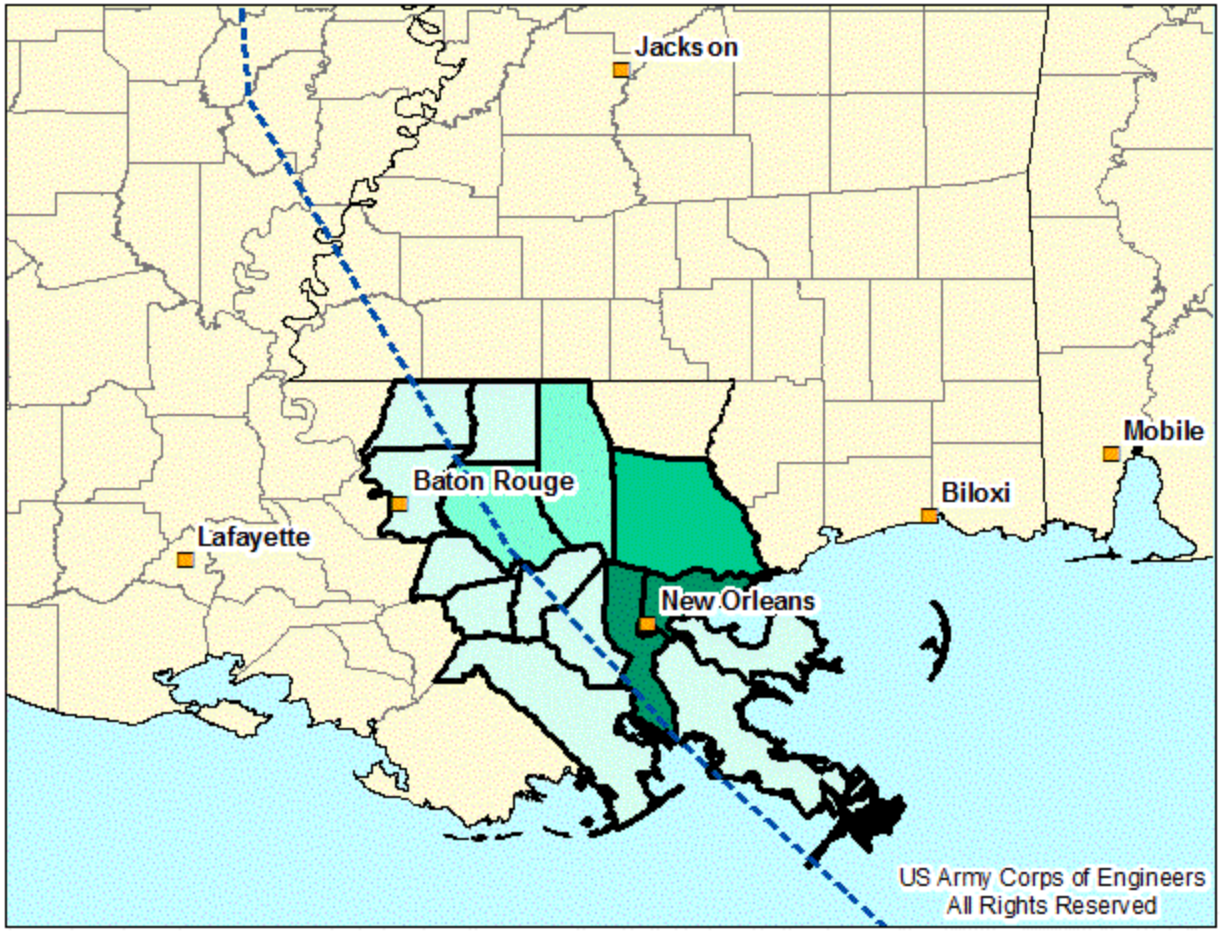
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Commodities Model

Landfall Expected In About 28 Hours

For Planning Purposes Only!



Post Landfall Water Model Results

Day One / Day Two / Day Three
Louisiana – 22/44/88 Truckloads

Model results per County on following page

This model is based on a Category 2 storm making landfall west of the Mississippi River Delta, LA.

Forecast Track

Commodities

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 2 storm making landfall west of the Mississippi River Delta, LA. These projections are based on information from the NHC ***(1700 EDT 08/27/2012)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents daily needs with a ramp-up in the distribution system – three days for Points of Distribution (PODs) to be fully in place and operational. Volume shown is for each commodity – water and ice. Commodity need may be supplied by multiple agencies and/or sources.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Commodities Model	
Generated By: Siemsen, LRL 1730 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	Page 4 of 18

US Army Corps of Engineers

Hurricane Isaac Commodities Model

Landfall Expected In About 28 Hours

For Planning Purposes Only!

State	Truckloads per State	County	Truckloads per County
Louisiana		Ascension Parish	1
		East Baton Rouge Parish	1
		East Feliciana Parish	1
		Jefferson Parish	26
		Lafourche Parish	1
		Livingston Parish	5
		Orleans Parish	22
		Plaquemines Parish	2
		St. Bernard Parish	3
		St. Charles Parish	4
		St. Helena Parish	1
		St. James Parish	1
		St. John the Baptist Pari	3
		St. Tammany Parish	11
		Tangipahoa Parish	6
Louisiana	88		

Source: US Army Corps of Engineers, All Rights Reserved

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested daily needs based on full deployment of a commodities distribution system. Volume shown is for each commodity – water and ice. Commodity need may be supplied by multiple agencies and/or sources.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Commodities Model

Generated By:
Siemsen, LRL 1730 EDT 08/27/2012

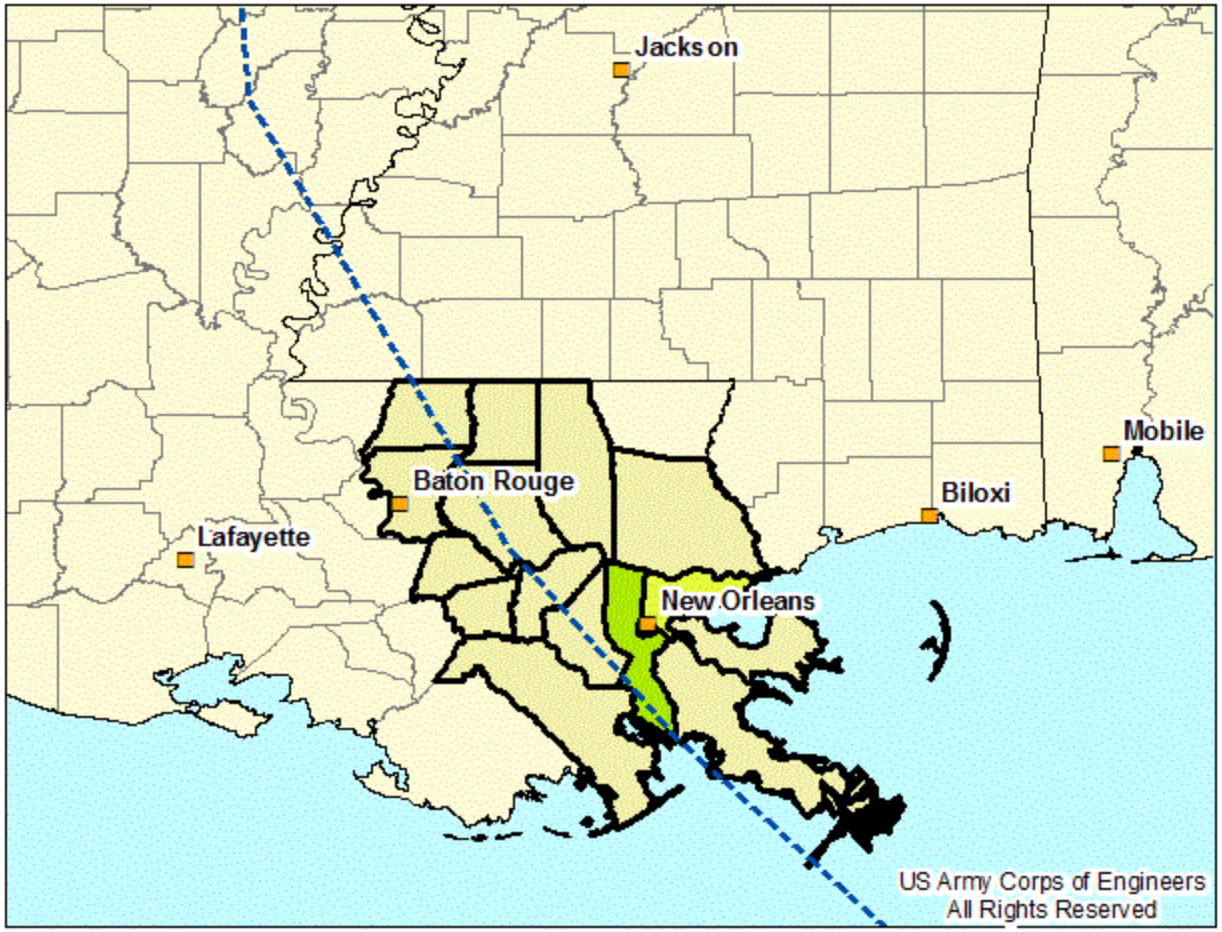
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Temporary Roofing Model

Landfall Expected In About 28 Hours

For Planning Purposes Only!



Post Landfall Temporary Roofing Model Results

Louisiana - 12,900

Model results per County on following page

This model is based on a Category 2 storm making landfall west of the Mississippi River Delta, LA.

Forecast Track

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 2 storm making landfall west of the Mississippi River Delta, LA. These projections are based on information from the NHC (1700 EDT 08/27/2012) forecast. Temporary roofing is based on 3% in CAT 1 and 6% in CAT 2.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Roofing Model

Generated By:
Siemsen, LRL 1730 EDT 08/27/2012

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Temporary Roofing Model

Landfall Expected In About 28 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Louisiana		Ascension Parish	< 100
		East Baton Rouge Parish	< 100
		East Feliciana Parish	< 100
		Jefferson Parish	4,600
		Lafourche Parish	< 100
		Livingston Parish	600
		Orleans Parish	3,000
		Plaquemines Parish	500
		St. Bernard Parish	400
		St. Charles Parish	800
		St. Helena Parish	< 100
		St. James Parish	< 100
		St. John the Baptist Pari	500
		St. Tammany Parish	1,700
		Tangipahoa Parish	800
Louisiana	12,900		

Temporary roofing is based on 3% in CAT 1 and 6% in CAT 2.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Isaac Roofing Model

Generated By:
Siemsen, LRL 1730 EDT 08/27/2012

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Temporary Housing Model

Landfall Expected In About 28 Hours

For Planning Purposes Only!

Post Landfall Temporary Housing Model Results

No Temporary Housing need expected

Model results per County on following page

This model is based on a Category 2 storm making landfall west of the Mississippi River Delta, LA.

Forecast Track

Temporary Housing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 2 storm making landfall west of the Mississippi River Delta, LA. These projections are based on information from the NHC (1700 EDT 08/27/2012) forecast. Temporary housing is based on nothing. The number indicated represents a possible need but not necessarily the scope of mission for USACE.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Housing Model	
Generated By: Siemsen, LRL 1730 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	Page 8 of 18

US Army Corps of Engineers

Hurricane Isaac Temporary Housing Model

Landfall Expected In About 28 Hours

For Planning Purposes Only!

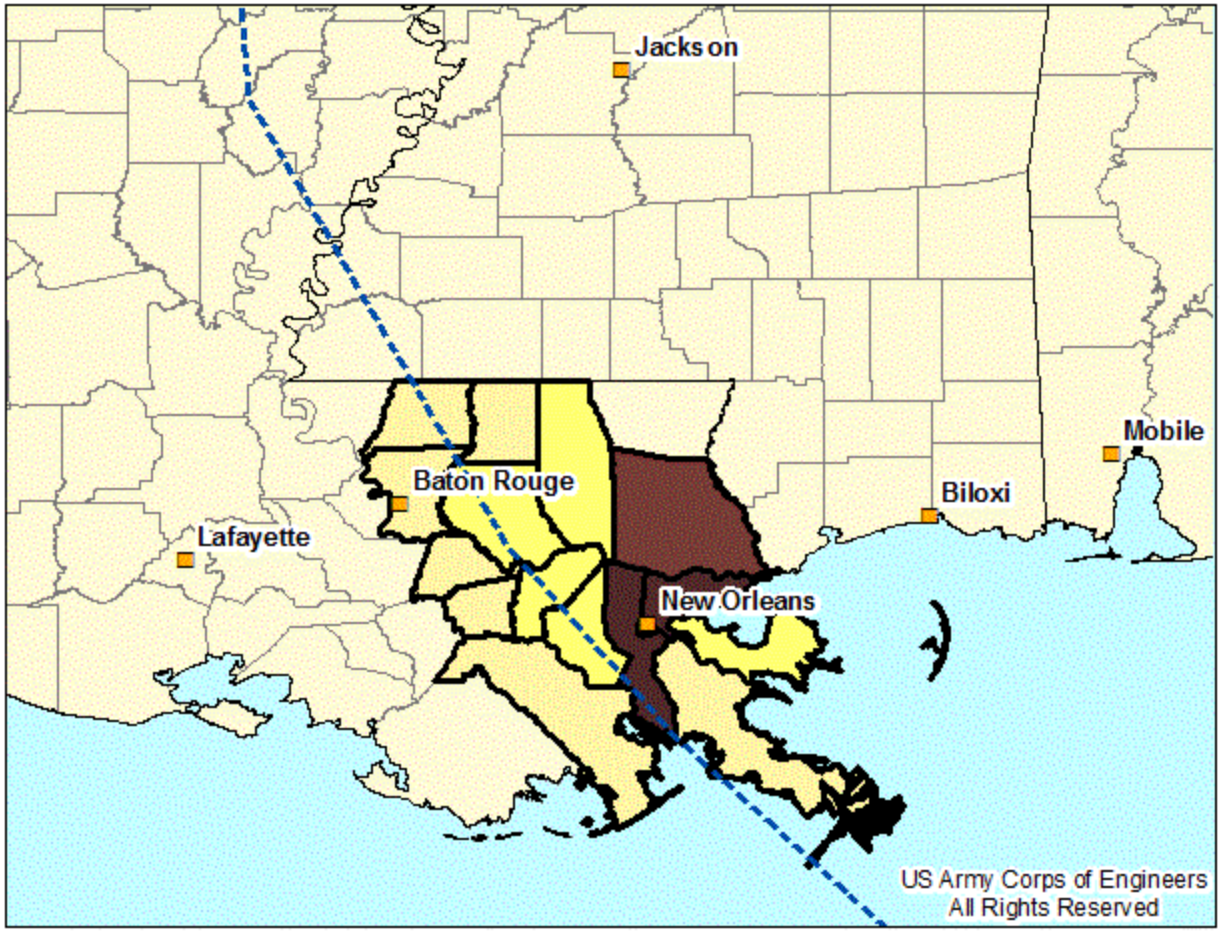
State	House Units per State	County	House Units per County

US Army Corps of Engineers

Hurricane Isaac Population Model

Landfall Expected In About 28 Hours

For Planning Purposes Only!



Post Landfall Population Model Results

Louisiana - 1,343,000

Model results per County on following page

This model is based on a Category 2 storm making landfall west of the Mississippi River Delta, LA.

Forecast Track

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 2 storm making landfall west of the Mississippi River Delta, LA. These projections are based on information from the NHC (1700 EDT 08/27/2012) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2010 values adjusted to July 2011 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Population Model	
Generated By: Siemsen, LRL 1730 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	Page 10 of 18

US Army Corps of Engineers

Hurricane Isaac Population Model

Landfall Expected In About 28 Hours

For Planning Purposes Only!

State	Population per State	County	Population per County
Louisiana		Ascension Parish	4,000
		East Baton Rouge Parish	3,000
		East Feliciana Parish	4,000
		Jefferson Parish	433,000
		Lafourche Parish	5,000
		Livingston Parish	82,000
		Orleans Parish	363,000
		Plaquemines Parish	24,000
		St. Bernard Parish	40,000
		St. Charles Parish	53,000
		St. Helena Parish	5,000
		St. James Parish	2,000
		St. John the Baptist Pari	44,000
		St. Tammany Parish	185,000
		Tangipahoa Parish	96,000
Louisiana	1,343,000		

The number of persons estimated to be within the hurricane force winds comes from Census 2010 values adjusted to July 2011 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Isaac Population Model

Generated By:
Siemsen, LRL 1730 EDT 08/27/2012

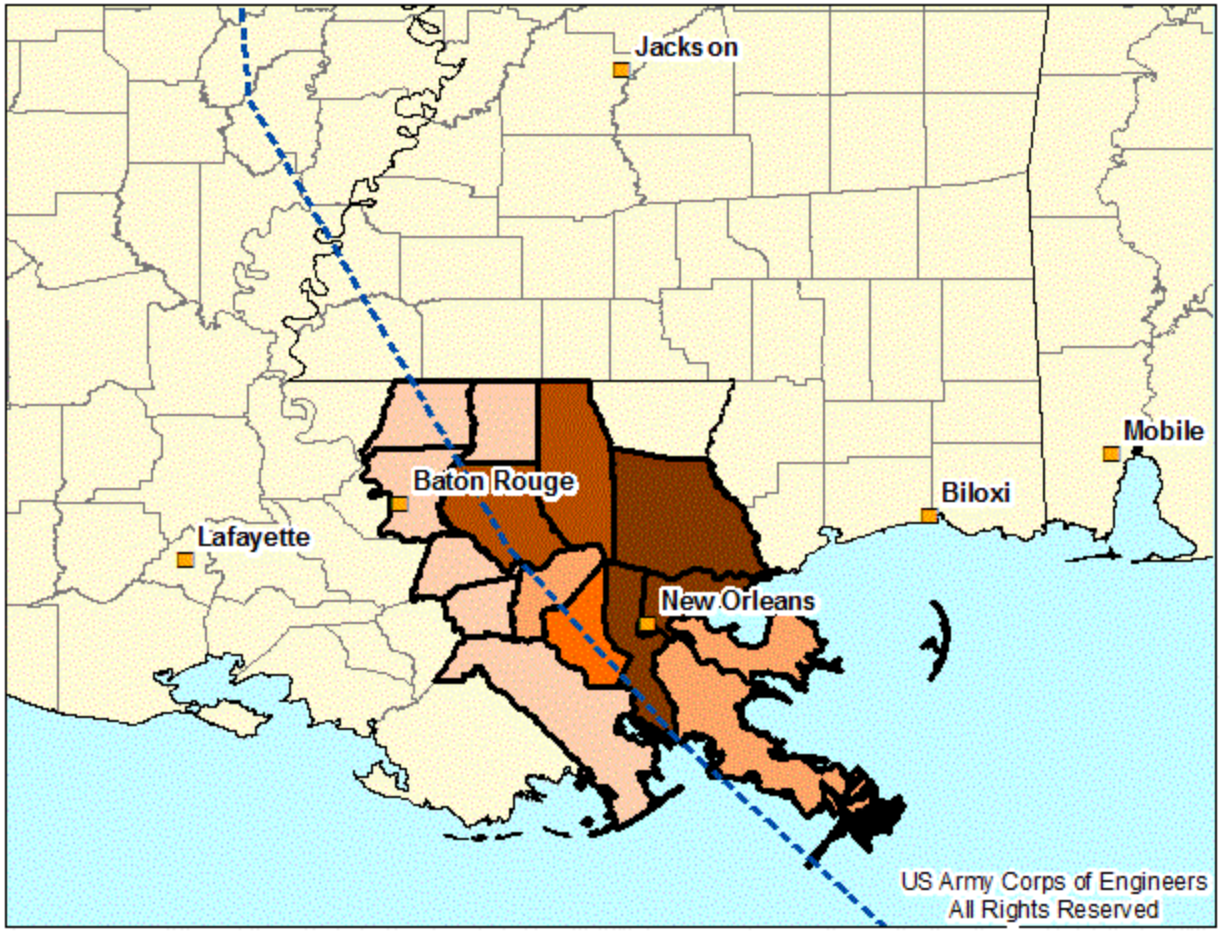
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Households Model

Landfall Expected In About 28 Hours

For Planning Purposes Only!



Post Landfall Households Model Results

Louisiana - 505,000

Model results per County on following page

This model is based on a Category 2 storm making landfall west of the Mississippi River Delta, LA.

Forecast Track

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 2 storm making landfall west of the Mississippi River Delta, LA. These projections are based on information from the NHC (1700 EDT 08/27/2012) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2010 values adjusted to July 2011 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Households Model	
Generated By: Siemsen, LRL 1730 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	Page 12 of 18

US Army Corps of Engineers

Hurricane Isaac Households Model

Landfall Expected In About 28 Hours

For Planning Purposes Only!

State	Households per State	County	Households per County
Louisiana		Ascension Parish	2,000
		East Baton Rouge Parish	< 1,000
		East Feliciana Parish	2,000
		Jefferson Parish	168,000
		Lafourche Parish	2,000
		Livingston Parish	29,000
		Orleans Parish	141,000
		Plaquemines Parish	8,000
		St. Bernard Parish	15,000
		St. Charles Parish	18,000
		St. Helena Parish	2,000
		St. James Parish	< 1,000
		St. John the Baptist Pari	15,000
		St. Tammany Parish	68,000
		Tangipahoa Parish	35,000
Louisiana	505,000		

The number of households estimated to be within the hurricane force winds comes from Census 2010 values adjusted to July 2011 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Isaac Households Model

Generated By:
Siemsen, LRL 1730 EDT 08/27/2012

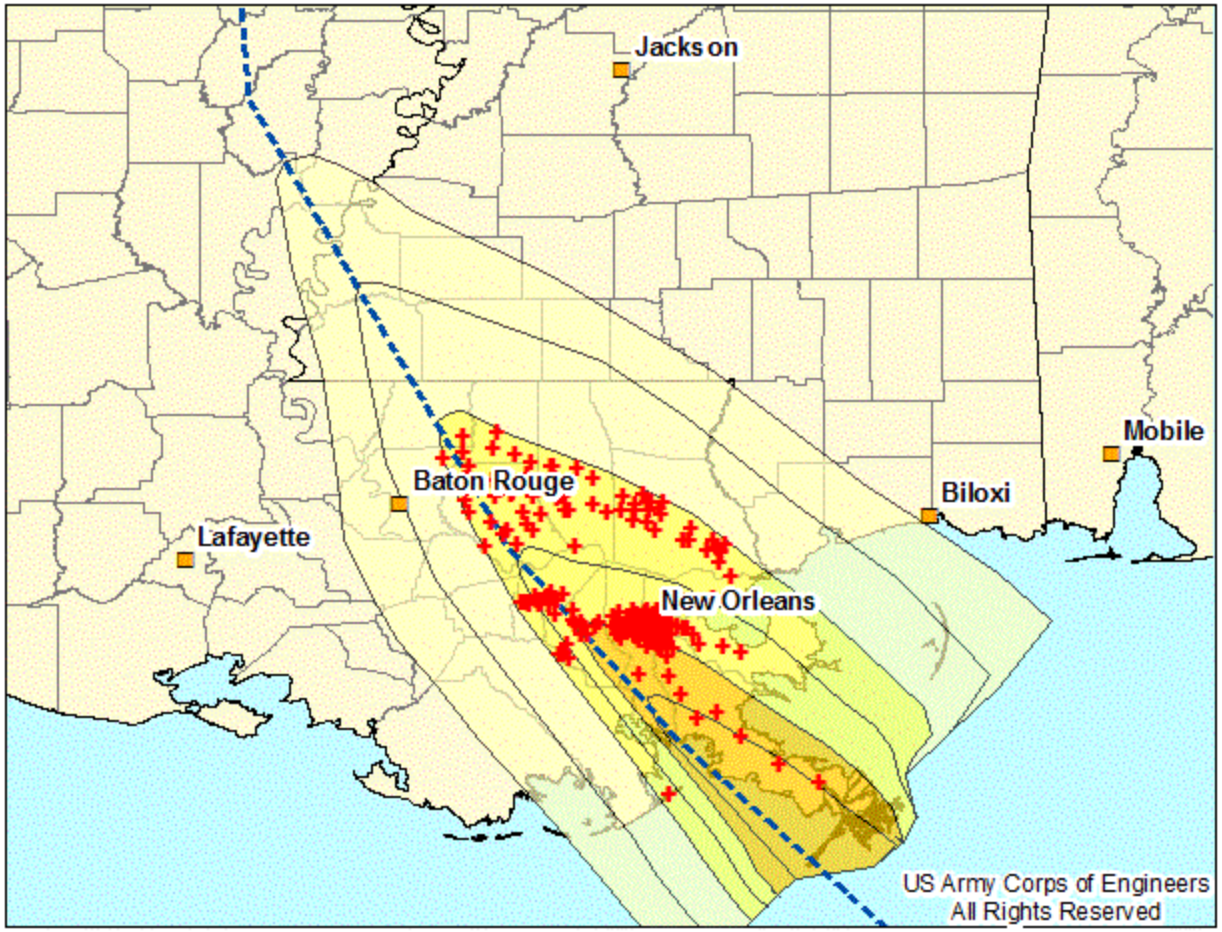
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Fire Stations

Landfall Expected In About 28 Hours

For Planning Purposes Only!



Most Probable Landfall Fire Stations Inside Hurricane Force Winds

Louisiana - 190

Model results per County on following page

This model is based on a Category 2 storm making landfall west of the Mississippi River Delta, LA.

+ Fire Stations

Forecast Track

Information provided on this page displays a Category 2 storm making landfall west of the Mississippi River Delta, LA. These projections are based on information from the NHC (1700 EDT 08/27/2012) forecast.

The number of fire stations included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2012).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

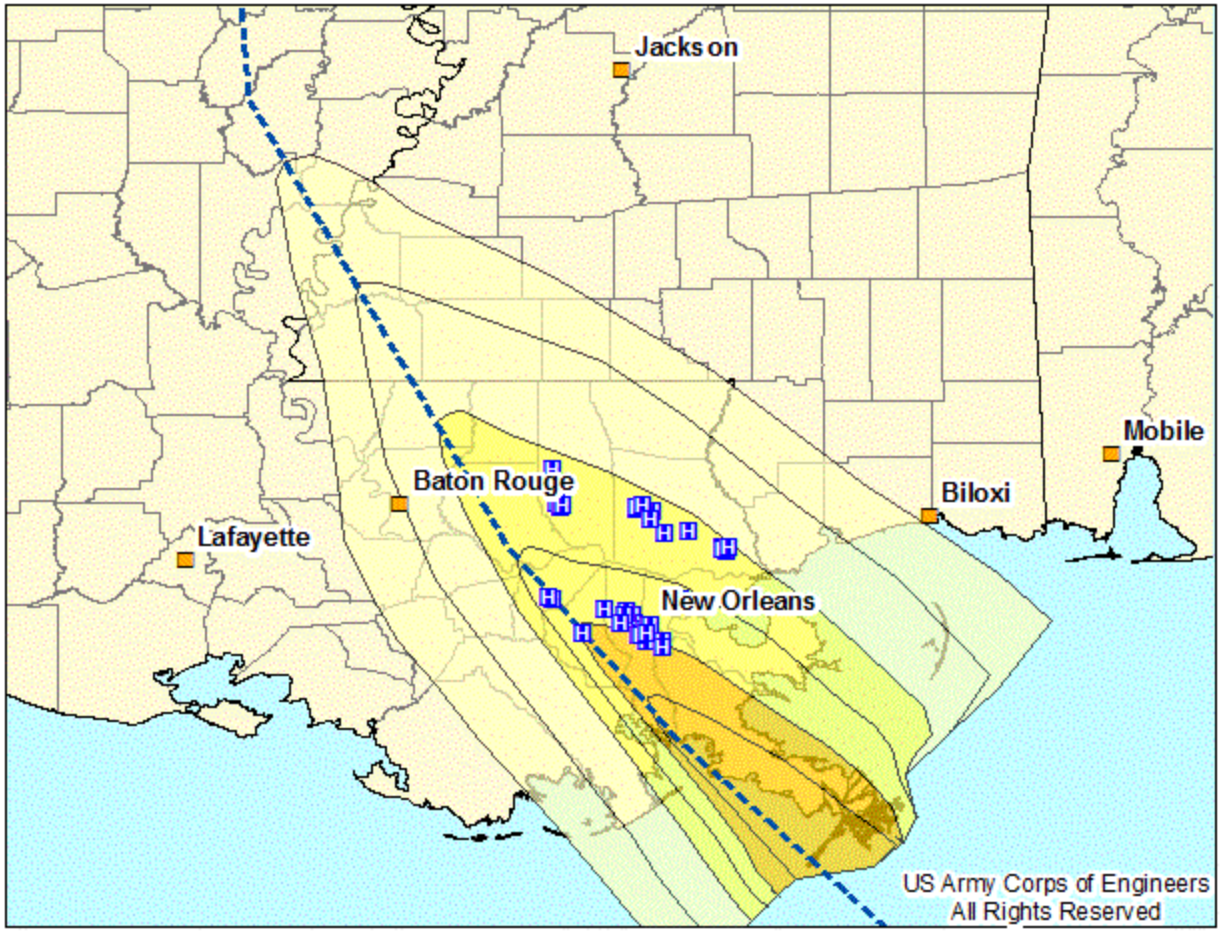
Hurricane Isaac Fire Stations	
Generated By: Siemsen, LRL 1730 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Isaac Hospitals

Landfall Expected In About 28 Hours

For Planning Purposes Only!



Most Probable Landfall Hospitals Inside Hurricane Force Winds

Louisiana - 47

Model results per County on following page

This model is based on a Category 2 storm making landfall west of the Mississippi River Delta, LA.

H Hospitals

Forecast Track

Information provided on this page displays a Category 2 storm making landfall west of the Mississippi River Delta, LA. These projections are based on information from the NHC (1700 EDT 08/27/2012) forecast.

The number of hospitals included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2012).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

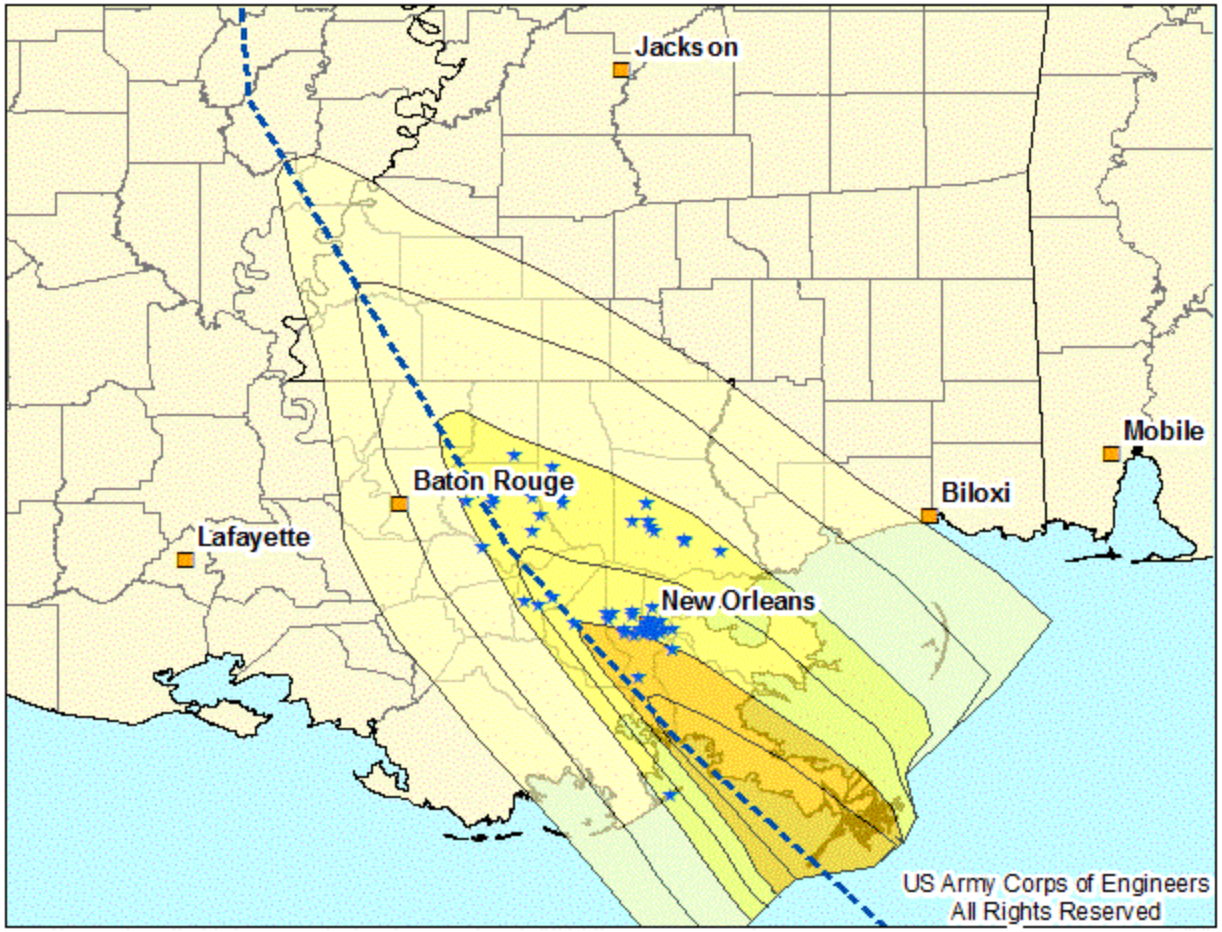
Hurricane Isaac Hospitals	
Generated By: Siemsen, LRL 1730 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	Page 15 of 18

US Army Corps of Engineers

Hurricane Isaac Law Enforcement

Landfall Expected In About 28 Hours

For Planning Purposes Only!



Most Probable Landfall Law Enforcement Inside Hurricane Force Winds

Louisiana - 61

Model results per County on following page

This model is based on a Category 2 storm making landfall west of the Mississippi River Delta, LA.

★ Law Enforcement

Forecast Track

Information provided on this page displays a Category 2 storm making landfall west of the Mississippi River Delta, LA. These projections are based on information from the NHC (1700 EDT 08/27/2012) forecast.

The number of law enforcement included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2012).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

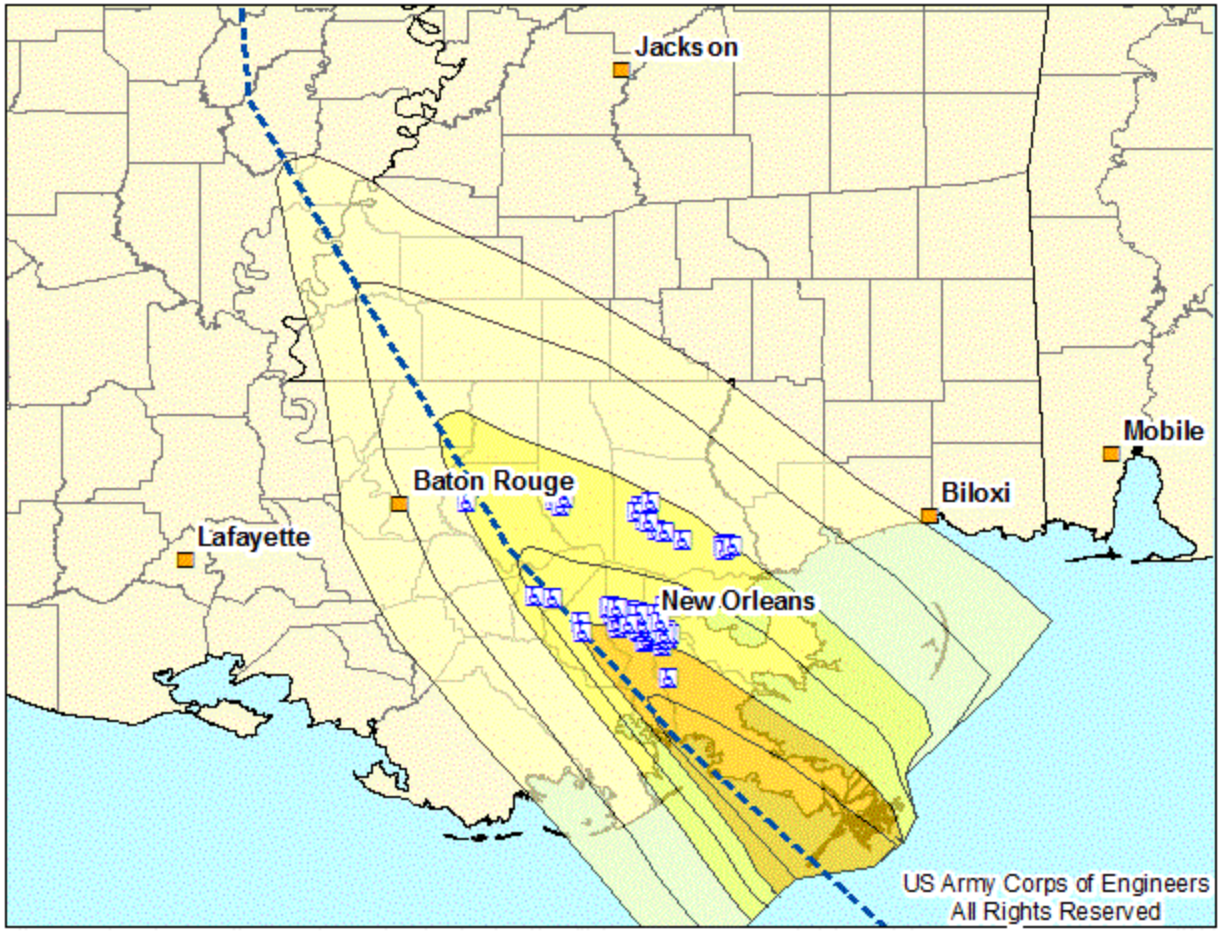
Hurricane Isaac Law Enforcement	
Generated By: Siemsen, LRL 1730 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	Page 16 of 18

US Army Corps of Engineers

Hurricane Isaac Nursing Homes

Landfall Expected In About 28 Hours

For Planning Purposes Only!



Most Probable Landfall Nursing Homes Inside Hurricane Force Winds

Louisiana - 84

Model results per County on following page

This model is based on a Category 2 storm making landfall west of the Mississippi River Delta, LA.

Nursing Homes

Forecast Track

Information provided on this page displays a Category 2 storm making landfall west of the Mississippi River Delta, LA. These projections are based on information from the NHC (1700 EDT 08/27/2012) forecast.

The number of nursing homes included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2012).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

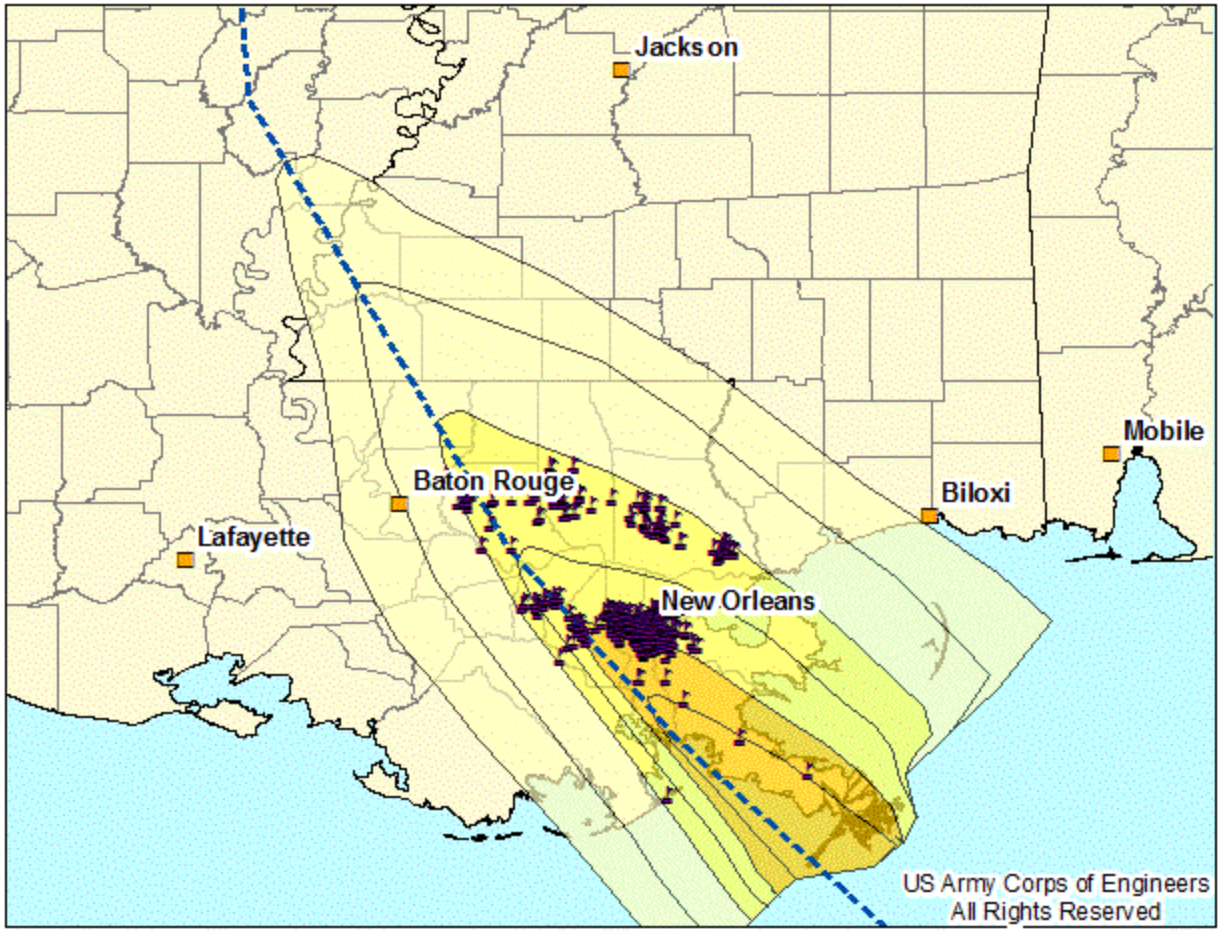
Hurricane Isaac Nursing Homes	
Generated By: Siemsen, LRL 1730 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Isaac Schools

Landfall Expected In About 28 Hours

For Planning Purposes Only!



Most Probable Landfall Schools Inside Hurricane Force Winds

Louisiana - 379

Model results per County on following page

This model is based on a Category 2 storm making landfall west of the Mississippi River Delta, LA.

Schools

Forecast Track

Information provided on this page displays a Category 2 storm making landfall west of the Mississippi River Delta, LA. These projections are based on information from the NHC (1700 EDT 08/27/2012) forecast.

The number of schools included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2012).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Schools	
Generated By: Siemsen, LRL 1730 EDT 08/27/2012	
Sources: HURREVAC LRL-DEBRIS	Page 18 of 18